

REMARKS

Claims 1 and 2 have been canceled and claims 3, 4, 6, 21, and 22 have been amended herein. Upon entry of this amendment, claims 3-28 will be pending in the present application.

Applicant acknowledges the indication of allowable subject matter in claims 3-20 and 22-28.

Claim 21 - Section 102

Applicant respectfully requests reconsideration of the rejection of claim 21 under 35 U.S.C. § 102(b) as being clearly anticipated by U.S. Patent No. 5,640,343 (Gallagher). The office action concedes that Gallagher fails to show formation of a plurality of stacks (page 3, lines 6-7). Therefore, all of the elements of claim 21 are not found in a single reference. Accordingly, the Section 102 rejection is improper and Applicant requests the rejection be withdrawn.

Claim 21 - Section 103

Applicant respectfully requests reconsideration of the rejection of claim 21 under 35 U.S.C. § 103(a) as being unpatentable over Gallagher. Claim 21 recites fabricating a data cell region on the memory substrate including presenting a data cell substrate having a plurality of protruded and recessed areas, forming a plurality of first stacks on the plurality of protruded and recessed areas, disposing a plurality of insulating layers between the plurality of adjacent first stacks, and forming a second stack on each adjacent first stack.

Gallagher discloses forming a magnetic tunnel junction (MTJ) 38 on a p-type region 39, forming the p-type region on a local word line 40, and forming the local word line on a substrate 100 (e.g., Figs. 10A-C). Gallagher does not disclose or suggest a data cell substrate, as recited in claim 21. The present specification shows examples of such a data cell substrate in Figs. 17-28.

Gallagher also fails to disclose or suggest forming a plurality of first stacks on protruded and recessed areas as claimed. The office action asserts that the stacks 38 of Gallagher are formed on the protruded areas formed by the p-type regions 39 and the recessed areas formed by the regions of insulating material 30 (page 2, lines 24-27). The office action also asserts that the protruding corners of insulating material 30 are deemed the recessed areas. Because the top of the portion of insulating material 30 contacting the MTJ 38 (i.e., the "protruding corners of insulating material 30") is flush with the top of the p-type region 39, neither the insulating

material 30 nor the p-type region 39 is protruded or recessed with respect to the other. If, on the other hand, the surface on which the lowest layer of insulating material 30 is disposed were considered the recessed area, being that it is recessed with respect to the top of the p-type region 39, Gallagher still fails to disclose or suggest "forming a plurality of first stacks on protruded and recessed areas" because the MTJ 38 is not formed on that surface.

Because Gallagher fails to disclose or suggest each claim element, the rejection is improper. Accordingly, Applicant requests the rejection be withdrawn.

Claims 3-5 and 22-28 - Section 112

Applicant respectfully requests reconsideration of the rejections of claims 3-5 and 22-28 under 35 U.S.C. § 112, paragraph 2. Applicant amended claims 4 and 22 as recommended by the Examiner to overcome the rejections. Accordingly, Applicant requests the rejections be withdrawn.

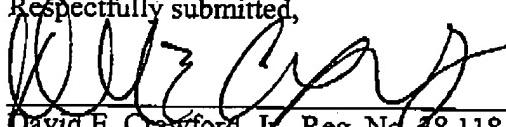
Claims 6-20

Applicant requests reconsideration of the objection of claims 6-20 as being dependent upon a rejected base claim. Claim 6 has been amended to independent form. Accordingly, the objection has been overcome and Applicant requests it be withdrawn.

Conclusion

As it is believed that the application is in condition for allowance, favorable action and a Notice of Allowance are respectfully requested.

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Respectfully submitted,
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